REMARKS/ARGUMENTS

Claims 1 – 20 are in the application. Claims 6 – 9 have been withdrawn from consideration pursuant to a requirement for restriction.

1. Restriction has been required between the following inventions:

I. Claims 1 – 5 and 10 – 20 drawn to a printer and classified in class 358, subclass 1.2; and

II. Claims 6 – 9 drawn to a device for transposing a transposable lens classified in class 359, subclass 355 or 508.

In support of the requirement, it is asserted that these groups of claims are related as subcombinations disclosed as usable together in a single combination with respect to Group II.

Applicant hereby affirms the provisional election of the claims of Group I (1 – 5 and 10 – 20) for examination in the present application without prejudice to his right to file a divisional application directed to the non-elected claims of Group II.

2. Applicant notes the allowance of claims 10 – 20.

3. Claims 1 – 5 have been rejected under 35 U.S.C. §103 (a) as being unpatentable over U.S. Patent 4,970,632 ("Miyakawa et al.") in view of U.S. Patent 6,678,074 ("Huang").

In support of the rejection the examiner has asserted, generally, that Miyakawa et al. teaches a printer having the elements recited in present claims 1 – 5 except that none of the lenses are transposable and capable of being transposed out of the optical axis during a printing operation. It is further asserted that Huang teaches a changeable resolution apparatus including a plurality of lenses which are transposable along an optical axis during a scanning operation to improve image resolution. The examiner has concluded that it would have been obvious to replace or modify the lens of the Miyakawa et al. printer with lenses that are transposable as shown by Huang.

Applicant traverses this ground of rejection. The references, viewed individually or in combination, do not teach or suggest the subject matter of claims 1 – 5 within the meaning of 35 U.S.C. § 103. Present claims 1 – 5 are drawn to a printer wherein resolution can be improved when imaging a digital display onto a larger photosensitive medium. Generally speaking, the image resolution is increased using the same area display by displacing the image formed by the display on the photosensitive medium image plane. This displacement is accomplished by a translation of an optical element, or lens, out of the optical axis during operation of the printer to increase the perceived resolution of the image focused onto the image plane.

The claimed printer utilizes one digital display, which may be a spatial light modulator, a liquid crystal display, an organic light emitting diode or other digital area display, to generate a higher resolution image.

The references relied upon to support the rejection of claims 1 – 5 do not teach or suggest applicant's claimed printer within the meaning of 35 U.S.C. § 103. Miyakawa et al. does describe a printer that exposes a section of a photosensitive film by using an area array. However, as acknowledged by the examiner, Miyakawa et al. does not utilize a transposable lens to expose the film.

As pointed out above, applicant's claimed printer increases the resolution of the image using the same digital area display by displacing the image formed by the display on the film image plane by a small amount. The displacement is accomplished by a small translation of the transposable lens from the center of the optical axis.

The secondary reference, Huang, does not render the rejection any more effective. Huang describes a multiresolution scanner that employs a plurality of lenses and charge coupled devices (CCD) to improve resolution. There is described in Fig. 6 a turret containing matched lenses and CCDs to improve resolution. Lens 11a cooperates with CCD 21a and lens 11b with CCD 21c. The changeable resolution is accomplished through the different resolution of the different CCD arrays 21a through 21d (see Fig. 4). In every case, the image to be scanned, the lenses in use and the CCD in use have a single optical axis with no active lens elements displaced from it. The entire assembly, including the CCD and the associated lens are moved in each instance.

Thus, Huang viewed in combination with Miyakawa et al. does not teach or suggest applicant's advantageous printer. In order to properly support a rejection under 35 U.S.C. § 103 a reference, or combination of references, must teach or suggest the claimed subject matter so as to place it in the possession of the general public. Here, as pointed out in detail above, applicant's claimed printer would not be obvious to those skilled in the art from the disclosures of the references.

Reconsideration of this ground of rejection and withdrawal thereof are respectfully requested.

4. Applicant notes the citation by the examiner as art of interest of commonly-assigned United States patent application serial no. 09/748,650 filed on even date with the present application (United States Patent Application Publication No. US 2002/0080243 A1) which is directed to a digital image printer and method.